

### **REMARKS**

In response to the Office Action mailed January 22, 2008, Applicants respectfully request reconsideration. Claims 1-11 were previously pending in this application. By this paper, claims 1, 7-9 and 11 have been amended. As a result, claims 1-11 are pending for examination with claims 1, 7, 8 and 11 being independent. No new matter has been added.

#### **Examiner Interview Summary**

As a preliminary matter, Applicants' representatives thank Examiner Vicary for courtesies extended in granting and conducting a telephone interview on April 15, 2008. The substance of the telephone interview is summarized hereinbelow.

#### **Rejections Under 35 U.S.C. §112**

The Office Action rejected claims 1-11 under 35 U.S.C. §112, second paragraph, as allegedly being indefinite. Applicants have amended claims 7-9 and 11 to address the Examiner's concerns. During the telephone interview, the Examiner indicated that the claim amendments overcame the rejection.

Accordingly, withdrawal of the rejection is respectfully requested.

#### **Rejections Under 35 U.S.C. §103**

The Office Action rejected claims 1-11 under 35 U.S.C. 103(a) as being unpatentable over Nexus 5001 Forum: Standard for a Global Embedded Processor Debug Interface (The Nexus 5001 Forum), hereinafter "Nexus," in view of Argade et al., (U.S. Patent No. 5,724,505), hereinafter "Argade." Applicants respectfully disagree.

Regarding claim 1, on page 5, the Office Action concedes that Nexus does not disclose providing an additional field comprising a second set of bits of the at least digital message and assigning to the second set of bits a third value identifying the jump from among several types of jumps. Claim 1 has been amended to recite "when the first set of bits is at the second value,

providing an additional field in the implicit jump message, the additional field comprising a second set of bits, and assigning to the second set of bits a third value identifying the jump as an implicit jump from among several types of implicit jumps.”

The Office Action alleges that Argade discloses the above limitation. Argade discloses INSTR\_TYPE signals from the processor core which indicate the type of each instruction executed. (Argade, col. 5, lines 39-41). By identifying an INSTR\_TYPE as one of the three types of pre-defined discontinuities, the TBC block 50 may determine whether to record or to discard its corresponding address (or addresses) and whether additional information about the INSTR\_TYPE needs to be recorded. (Argade, col. 5, lines 43-48).

The Office Action alleges that, in col. 6, lines 24-27, Argade discloses the signal that is a digital message. However, this portion of Argade discusses that **a multiplexer 56 combines the outputs of the address FIFO 52 and INSTR\_TYPE FIFO 54 into a single signal** which is transmitted to the JTAG interface 24 via the line 38. (Emphasis added). This is different from assigning a first value to a first set of bits of at least one digital message to provide an explicit jump message, and if not, assigning a second value to the first set of bits to provide an implicit jump message, as recited in claim 1. Argade does not teach or suggest a first set of bits of a digital message or a second set of bits of a digital message. Furthermore, Argade does not teach or suggest “when the first set of bits is at the second value, providing an additional field in the implicit jump message, the additional field comprising a second set of bits, and assigning to the second set of bits a third value identifying the jump as an implicit jump from among several types of implicit jumps,” as recited in claim 1.

On page 7, The Office Action discusses that Argade discloses that type\_3 discontinuity does not need to record an address, which fits into Nexus “teaching of his program trace, direct branch message of Table 6-6, which does not have an address field.” The Office Action also states that Tables 6-6 and 6-7 show that “the two different types of messages **are already of different length**” and “it would have been readily recognized to one of ordinary skill in the art at the time of the invention that the jump type field would be added to the indirect branch message without affecting the direct branch message.” (Emphasis added). It is not clear why the difference in the length of the direct and indirect branch messages of Nexus would suggest that an additional field needs to be

Accordingly, claim 7 patentably distinguishes over Nexus and Argade, either alone or in combination.

Accordingly, withdrawal of the rejection of claim 7 is respectfully requested.

C. Independent Claim 8

Claim 8, as amended, recites, inter alia, "if the jump is implicit, generating the at least one digital message as an implicit jump message and providing an additional field in the implicit jump message, wherein the additional field includes a value identifying a type of the implicit jump." As discussed above, neither Nexus nor Argade teaches or suggests this limitation.

Accordingly, claim 8 patentably distinguishes over Nexus and Argade, either alone or in combination.

Claims 9 and 10 depend from claim 8 and are allowable for at least the same reasons.

Accordingly, withdrawal of the rejection of claims 8-10 is respectfully requested.

D. Independent Claim 11

Claim 8, as amended, recites, inter alia, "if the jump is implicit, providing an additional field in at least one digital message to provide the at least one digital message as an implicit jump message transmitted on the execution of the instruction sequence by the microprocessor, wherein the additional field includes a value identifying a type of the implicit jump." As discussed above, neither Nexus nor Argade teaches or suggests this limitation.

Accordingly, claim 11 patentably distinguishes over Nexus and Argade, either alone or in combination.

Accordingly, withdrawal of the rejection of claim 11 is respectfully requested.

added to an indirect branch message, since this would result in further increase in the difference in length between the two messages. Moreover, neither Nexus nor Argade recognizes any problem that would be solved by combining the teachings of the art. In addition, it is not clear why, even if the references were combined, would an additional field be added only to an implicit jump message and not to both implicit and explicit jump messages.

During the interview, the Examiner maintained that a combination of Nexus and Argade renders the subject matter of independent claims 1, 7, 8 and 11 obvious. However, the Examiner did not establish a *prima facie* case of obviousness, as required by the MPEP §2142. Applicants' representatives disagree and maintain that a reason to combine the cited references to render independent claims 1, 7, 8 and 11 and respective dependent claims obvious is lacking and has not been articulated either in the Office Action or in the course of the interview.

The Claims Patentably Distinguish over a Combination of Nexus and Argade

A. Independent Claim 1

As discussed above, neither Nexus nor Argade teaches or suggests "when the first set of bits is at the second value, providing an additional field in the implicit jump message, the additional field comprising a second set of bits, and assigning to the second set of bits a third value identifying the jump as an implicit jump from among several types of implicit jumps," as recited in claim 1.

Accordingly, claim 1 patentably distinguishes over Nexus and Argade, either alone or in combination.

Claims 2-6 depend from claim 1 and are allowable for at least the same reasons.

Accordingly, withdrawal of the rejection of claims 1-6 is respectfully requested.

B. Independent Claim 7

Claim 7, as amended, recites, inter alia, "wherein, when the first set of bits is set to the second value, the generation means provides an additional field in the implicit jump message, the additional field comprising a second set of bits, with the second set of bits set to a third value identifying an implicit jump from among several implicit jump types." As discussed above, neither Nexus nor Argade teaches or suggests this limitation.

**CONCLUSION**

In view of the foregoing amendments and remarks, this application should now be in condition for allowance. A notice to this effect is respectfully requested. If the Examiner believes, after this amendment, that the application is not in condition for allowance, the Examiner is requested to call the Applicants' representative at the telephone number indicated below to discuss any outstanding issues relating to the allowability of the application.

If this response is not considered timely filed and if a request for an extension of time is otherwise absent, Applicants hereby request any necessary extension of time. If there is a fee occasioned by this response, including an extension fee, that is not covered by an enclosed check, please charge any deficiency to Deposit Account No. 23/2825, under Docket No. S1022.81242US00.

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